

DETAILED ACTION

Introduction

1. The following is a non-final office action in response to the communications received on 9/20/2011. Claims 1, 2, 4, 5, 7-9 & 11-23 now pending in this application.

2. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

In view of the appeal brief filed on June 27, 2011, PROSECUTION IS HEREBY REOPENED. New grounds of rejection under 35 USC 103(a) are set forth below. To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 5, 7-9 & 11-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang US 6,587,970 B1 in view of Kramer US 5,038,284.

As per claim 1 (previously presented) Wang US 6,587,970 B1 discloses a method for trading in securities, the trading being carried out at a primary site that includes a primary site computer according to information received from market makers and traders, said information comprising quotes from market makers and orders from traders for one or more instruments, wherein the primary computer is arranged to communicate over a communications link with a secondary site computer located at a secondary site different from the primary site, the method comprising:

receiving and storing of said information at the primary site computer ("According to a further aspect of the present invention, a method and apparatus for performing electronic commerce is described. In one embodiment, a method of performing electronic commerce includes acts of hosting an electronic commerce site on a first host computer, detecting a change in operation of the electronic commerce site, and automatically configuring a second host computer to host at

Art Unit: 3684

least a portion of the electronic commerce site on the second host computer in response to the act of detecting.” Wang US 6,587,970 B1 col. 3, lines 23-32); and

using said information to create deals in said instruments, said deals also being stored at the primary site computer (“According to a further aspect of the present invention, a method and apparatus for performing electronic commerce is described. In one embodiment, a method of performing electronic commerce includes acts of hosting an electronic commerce site on a first host computer, detecting a change in operation of the electronic commerce site, and automatically configuring a second host computer to host at least a portion of the electronic commerce site on the second host computer in response to the act of detecting.” Wang US 6,587,970 B1 col. 3, lines 23-32);

Wang US 6,587,970 B1 fails to explicitly teach transmitting from the primary site computer to the secondary site computer replicas of the orders and the deals, but not transmitting from the primary site computer to the secondary site computer replicas of each of the quotes.

Kramer US 5,038,284 teaches “Still further objects of the invention relate to improvement of the ability to maintain and update in the portable stations, a table of symbols along with various factors that pertain to the computation of profit or loss, given prices and number of contracts, to provide for the addition of a transaction number at the entry within the portable stations, and **further to provide for bid and asked keys to permit reporting quotes as well as trades.**” Kramer US 5,038,284 col. 4, lines 16-17) Examiner notes that Kramer

Art Unit: 3684

US 5,038,284 teaches the addition of bid and ask keys which make the reporting of quotes as well as trades optional.

It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Wang US 6,587,970 B1 to include receiving and storing external information as taught by Kramer US 5,038,284,. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Wang US 6,587,970 B1 in this way in order to enable a secondary host computer to utilize a backup copy of data used by the primary host computer (see at least col. 12, lines 15-16 of Wang US 6,587,970 B1)

As per claim 2 (previously presented) Wang US 6,587,970 B1 in view of Kramer US 5,038,284 teaches a method of claim 1.

Wang US 6,587,970 B1 further discloses the step of storing at the secondary site computer replicas only of orders which have not yet resulted in deals. ("In other embodiments, only portions of the data of the primary host computer 110 are replicated" Wang US 6,587,970 B1 col. 17, lines 5-7)

Claim 3 Canceled.

As per claim 4 (previously presented) Wang US 6,587,970 B1 discloses an automated system for trading in securities, said system comprising:
a primary site including a primary site computer programmed to:

Art Unit: 3684

receive information from market makers and traders, said information comprising quotes from market makers and orders from traders for at least one instrument (“According to a further aspect of the present invention, a method and apparatus for performing electronic commerce is described. In one embodiment, a method of performing electronic commerce includes acts of hosting an electronic commerce site on a first host computer, detecting a change in operation of the electronic commerce site, and automatically configuring a second host computer to host at least a portion of the electronic commerce site on the second host computer in response to the act of detecting.” Wang US 6,587,970 B1 col. 3, lines 23-32),

store said information in memory at the primary site associated with the primary site computer, create deals using said received information (“According to a further aspect of the present invention, a method and apparatus for performing electronic commerce is described. In one embodiment, a method of performing electronic commerce includes acts of hosting an electronic commerce site on a first host computer, detecting a change in operation of the electronic commerce site, and automatically configuring a second host computer to host at least a portion of the electronic commerce site on the second host computer in response to the act of detecting.” Wang US 6,587,970 B1 col. 3, lines 23-32) and store said deals in the memory at the primary site (“According to another embodiment of the present invention, a storage system for use with a first host computer and a second host computer is provided.” Wang US 6,587,970 B1 col. 2, lines 19-20), and

Art Unit: 3684

Wang US 6,587,970 B1 fails to explicitly teach transmitting from the primary site computer to a secondary site computer located at a secondary site physically separate from the primary site replicas of the orders and the deals, but not transmit from the primary site computer to the secondary site computer replicas of each of the quotes.

Kramer US 5,038,284 teaches "Still further objects of the invention relate to improvement of the ability to maintain and update in the portable stations, a table of symbols along with various factors that pertain to the computation of profit or loss, given prices and number of contracts, to provide for the addition of a transaction number at the entry within the portable stations, and **further to provide for bid and asked keys to permit reporting quotes as well as trades.**" Kramer US 5,038,284 col. 4, lines 16-17) Examiner notes that Kramer US 5,038,284 teaches the addition of bid and ask keys which make the reporting of quotes as well as trades optional.

It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Wang US 6,587,970 B1 to include receiving and storing external information as taught by Kramer US 5,038,284,. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Wang US 6,587,970 B1 in this way in order to enable a secondary host computer to utilize a backup copy of data used by the primary host computer (see at least col. 12, lines 15-16 of Wang US 6,587,970 B1)

Art Unit: 3684

As per claim 5 (previously presented) Wang US 6,587,970 B1 in view of Kramer US 5,038,284 teaches a system of claim 4.

Wang US 6,587,970 B1 further discloses that the secondary site including the secondary site computer, wherein the secondary site computer is programmed to store replicas of the deals created at the primary site in a memory at the secondary site associated with the secondary site computer and store replicas only of orders which have not yet resulted in deals. ("In other embodiments, only portions of the data of the primary host computer 110 are replicated" Wang US 6,587,970 B1 col. 17, lines 5-7)

Claim 6 Canceled.

As per claim 7 (previously presented) Wang US 6,587,970 B1 discloses a method for use in the automated trading of securities, the trading being carried out using a primary site computer located at a primary site according to information received from market makers and traders, said information comprising quotes from market makers and orders from traders for one or more instruments, wherein the primary computer is arranged to communicate over a communications link with a secondary site computer located at a secondary site geographically remote from the primary site, the method comprising:

receiving and storing said information at the primary site computer ("According to a further aspect of the present invention, a method and apparatus for performing electronic commerce is described. In one embodiment, a method of performing

Art Unit: 3684

electronic commerce includes acts of hosting an electronic commerce site on a first host computer, detecting a change in operation of the electronic commerce site, and automatically configuring a second host computer to host at least a portion of the electronic commerce site on the second host computer in response to the act of detecting.” Wang US 6,587,970 B1 col. 3, lines 23-32);

the primary site computer using said information to create deals in said securities, said deals being stored at the primary site computer (“According to a further aspect of the present invention, a method and apparatus for performing electronic commerce is described. In one embodiment, a method of performing electronic commerce includes acts of hosting an electronic commerce site on a first host computer, detecting a change in operation of the electronic commerce site, and automatically configuring a second host computer to host at least a portion of the electronic commerce site on the second host computer in response to the act of detecting.” Wang US 6,587,970 B1 col. 3, lines 23-32); and

storing at the secondary site computer replicas of the orders and deals, wherein trading of securities is continued at the secondary site in case of a malfunction at the primary site, in which case the market makers and traders are prompted to submit new quotes to the secondary site (“In one embodiment of the present invention, these renewable host resources are provided in the form of a secondary or failover host computer that can be automatically configured and brought on line to replace a failing primary host computer.” Wang US 6,587,970 B1 col. 5, lines 28-35).

Art Unit: 3684

Wang US 6,587,970 B1 fails to explicitly teach transmitting from the primary site computer to the secondary site computer replicas of the orders and the deals, but not transmitting from the primary site computer to the secondary site computer replicas of each of the quotes.

Kramer US 5,038,284 teaches "Still further objects of the invention relate to improvement of the ability to maintain and update in the portable stations, a table of symbols along with various factors that pertain to the computation of profit or loss, given prices and number of contracts, to provide for the addition of a transaction number at the entry within the portable stations, and **further to provide for bid and asked keys to permit reporting quotes as well as trades.**" Kramer US 5,038,284 col. 4, lines 16-17) Examiner notes that Kramer US 5,038,284 teaches the addition of bid and ask keys which make the reporting of quotes as well as trades optional.

It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Wang US 6,587,970 B1 to include receiving and storing external information as taught by Kramer US 5,038,284,. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Wang US 6,587,970 B1 in this way in order to enable a secondary host computer to utilize a backup copy of data used by the primary host computer (see at least col. 12, lines 15-16 of Wang US 6,587,970 B1)

As per claim 8 (previously presented) Wang US 6,587,970 B1 in view of Kramer US 5,038,284 teaches a method of claim 7.

Art Unit: 3684

Wang US 6,587,970 B1 further discloses a secondary site computer using a corrective function and the deals stored at the secondary site computer to update the orders stored at the secondary site computer. ("In one embodiment of the present invention, these renewable host resources are provided in the form of a secondary or failover host computer that can be automatically configured and brought on line to replace a failing primary host computer." Wang US 6,587,970 B1 col. 5, lines 28-35)

As per claim 9 (previously presented) Wang US 6,587,970 B1 in view of Kramer US 5,038,284 teaches a method of claim 7.

Wang US 6,587,970 B1 further discloses that an operator or the secondary site computer makes the determination that there has been a malfunction at the primary site, and that the trading should be continued at the secondary site. ("For example, rather than utilizing relays 170 and 171 to automatically power-off the primary host computer 110 and automatically power-on the secondary host computer 120, one or more of these steps may be performed manually." Wang US 6,587,970 B1 col. 10, lines 42-46)

Claim 10 Canceled.

As per claim 11 (previously presented) Wang US 6,587,970 B1 in view of Kramer US 5,038,284 teaches a method of claim 7.

Art Unit: 3684

Wang US 6,587,970 B1 further discloses that the replicas stored at the secondary site computer are based on information received at the secondary site directly from the market makers and traders. ("In one embodiment of the present invention, these renewable host resources are provided in the form of a secondary or failover host computer that can be automatically configured and brought on line to replace a failing primary host computer." Wang US 6,587,970 B1 col. 5, lines 28-35)

As per claim 12 (previously presented) Wang US 6,587,970 B1 discloses an automated system for trading in securities, said system comprising:

a primary site including:

automated means for receiving information from market makers and traders, said information comprising quotes from market makers and orders from traders for at least one instrument ("According to a further aspect of the present invention, a method and apparatus for performing electronic commerce is described. In one embodiment, a method of performing electronic commerce includes acts of hosting an electronic commerce site on a first host computer, detecting a change in operation of the electronic commerce site, and automatically configuring a second host computer to host at least a portion of the electronic commerce site on the second host computer in response to the act of detecting." (Wang US 6,587,970 B1 col. 3, lines 23-32),

automated means for storing said information at the primary site ("According to a further aspect of the present invention, a method and apparatus for performing

Art Unit: 3684

electronic commerce is described. In one embodiment, a method of performing electronic commerce includes acts of hosting an electronic commerce site on a first host computer, detecting a change in operation of the electronic commerce site, and automatically configuring a second host computer to host at least a portion of the electronic commerce site on the second host computer in response to the act of detecting.” Wang US 6,587,970 B1 col. 3, lines 23-32),

automated means for creating deals using said received information (“According to a further aspect of the present invention, a method and apparatus for performing electronic commerce is described. In one embodiment, a method of performing electronic commerce includes acts of hosting an electronic commerce site on a first host computer, detecting a change in operation of the electronic commerce site, and automatically configuring a second host computer to host at least a portion of the electronic commerce site on the second host computer in response to the act of detecting.” (Wang US 6,587,970 B1 col. 3, lines 23-32),

Wang US 6,587,970 B1 fails to explicitly teach automated means for storing said deals at the primary site, and automated means for transmitting from the primary site to the automated means located at a secondary site physically separate from the primary site replicas of the orders and the deals, wherein the automated means for transmitting is configured not to transmit from the primary site to the automated means located at a secondary site replicas of each of the quotes.

Kramer US 5,038,284 teaches “Still further objects of the invention relate to improvement of the ability to maintain and update in the portable stations, a table of symbols along with various factors that pertain to the computation of profit or

Art Unit: 3684

loss, given prices and number of contracts, to provide for the addition of a transaction number at the entry within the portable stations, and **further to provide for bid and asked keys to permit reporting quotes as well as trades.**" Kramer US 5,038,284 col. 4, lines 16-17) Examiner notes that Kramer US 5,038,284 teaches the addition of bid and ask keys which make the reporting of quotes as well as trades optional.

It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Wang US 6,587,970 B1 to include receiving and storing external information as taught by Kramer US 5,038,284,. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Wang US 6,587,970 B1 in this way in order to enable a secondary host computer to utilize a backup copy of data used by the primary host computer (see at least col. 12, lines 15-16 of Wang US 6,587,970 B1)

As per claim 13 (previously presented) Wang US 6,587,970 B1 in view of Kramer US 5,038,284 teaches a system of claim 12.

Wang US 6,587,970 B1 further discloses that the secondary site, wherein the secondary site automated means is configured to store replicas of the deals created at the primary site and store replicas only of orders which have not yet resulted in deals. ("In other embodiments, only portions of the data of the primary host computer 110 are replicated" Wang US 6,587,970 B1 col. 17, lines 5-7)

Art Unit: 3684

As per claim 14 (previously presented) Wang US 6,587,970 B1 in view of Kramer US 5,038,284 teaches a system of claim 12.

Wang US 6,587,970 B1 further discloses an automated means for transmitting from the primary site to the secondary site the information on which the replicas at the secondary site are based. ("After shutting down the primary host computer 110 at step 220, the site failover routine proceeds to step 230, wherein the data of the primary host computer 110 is replicated or copied to another storage device 135 of the storage system that can be accessed by the secondary host computer 120." Wang US 6,587,970 B1 col. 9, lines 37-41)

As per claim 15 (previously presented) Wang US 6,587,970 B1 in view of Kramer US 5,038,284 teaches a system of claim 12.

Wang US 6,587,970 B1 further discloses an automated means at the secondary site for receiving information directly from the market makers and traders on which the replicas stored at the secondary site are based. ("In one embodiment of the present invention, these renewable host resources are provided in the form of a secondary or failover host computer that can be automatically configured and brought on line to replace a failing primary host computer." Wang US 6,587,970 B1 col. 5, lines 28-35)

As per claim 16 (previously presented) Wang US 6,587,970 B1 discloses an automated corrective method for use in an automated system for trading in securities, comprising:

Art Unit: 3684

storing the system information at the secondary site in a memory associated with the secondary site computer, and

the secondary site computer using the deal information passed to the secondary site computer to update the order information stored at the secondary site computer. (“In one embodiment of the present invention, these renewable host resources are provided in the form of a secondary or failover host computer that can be automatically configured and brought on line to replace a failing primary host computer.” Wang US 6,587,970 B1 col. 5, lines 28-35)

Wang US 6,587,970 B1 fails to explicitly teach passing system information regarding orders from traders and deals for one or more instruments from a primary trading site computer to a secondary site computer located at a secondary site linked to the primary trading site by a communications link, but not passing from the primary trading site computer to the secondary site computer quotes from market makers for the one or more instruments

Kramer US 5,038,284 teaches “Still further objects of the invention relate to improvement of the ability to maintain and update in the portable stations, a table of symbols along with various factors that pertain to the computation of profit or loss, given prices and number of contracts, to provide for the addition of a transaction number at the entry within the portable stations, and **further to provide for bid and asked keys to permit reporting quotes as well as trades.**” Kramer US 5,038,284 col. 4, lines 16-17) Examiner notes that Kramer US 5,038,284 teaches the addition of bid and ask keys which make the reporting of quotes as well as trades optional.

Art Unit: 3684

It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Wang US 6,587,970 B1 to include receiving and storing external information as taught by Kramer US 5,038,284,. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Wang US 6,587,970 B1 in this way in order to enable a secondary host computer to utilize a backup copy of data used by the primary host computer (see at least col. 12, lines 15-16 of Wang US 6,587,970 B1)

As per claim 17 (previously presented) Wang US 6,587,970 B1 in view of Kramer US 5,038,284 teaches an automated corrective method of claim 16.

Wang US 6,587,970 B1 further discloses monitoring the information regarding deals stored at the secondary site computer in order to update the information regarding orders stored at the secondary site computer. ("The replicated data may also be periodically updated, prior to a detected malfunction or failure of the primary host computer 110, to reflect any changes made to the data of the primary host computer 110 during operation." Wang US 6,587,970 B1 col. 10, lines 58-62)

As per claim 18 (previously presented) Wang US 6,587,970 B1 in view of Kramer US 5,038,284 teaches an automated corrective method of claim 16.

Wang US 6,587,970 B1 further discloses that the order information which is passed to the secondary site computer is passed via the deal information stored at the secondary site computer. ("This helps to ensure that data can be quickly

Art Unit: 3684

accessed by both the primary and secondary host computers 110, 120, as different storage devices and adapters are involved in the transfers of data for the different host computers.” Wang, US 6,587,970 B1 col. 35, lines 32-35)

As per claim 19 (previously presented) Wang US 6,587,970 B1 in view of Kramer US 5,038,284 teaches an automated corrective method of claim 16.

Wang US 6,587,970 B1 further discloses that copying of the orders and deals are stored at the secondary site computer and at defined intervals, said orders are processed based on information associated with said deals. (“The replicated data may also be periodically updated, prior to a detected malfunction or failure of the primary host computer 110, to reflect any changes made to the data of the primary host computer 110 during operation.” Wang US 6,587,970 B1 col. 10, lines 58-62)

As per claim 20 (previously presented) Wang US 6,587,970 B1 discloses a computer for use in an automated system for trading in securities, in which system information regarding orders from traders and deals for one or more instruments from a primary trading site computer is passed to and stored at a secondary site located remotely from the primary trading site (“However, the use of the configurable parameters of the primary host computer 110 by the secondary host computer 120 may prevent access to the secondary host computer 120. This is because the primary and secondary host computers 110, 120 are located in different networks, and most bridges or routers filter or forward

Art Unit: 3684

packets according to their destination IP or other network address.” Wang US 6,587,970 B1 col. 20, lines 39-45),

wherein the computer is configured for operation at the secondary site to use the deal information passed to the secondary site to update the order information stored at the secondary site. (“The replicated data may also be periodically updated, prior to a detected malfunction or failure of the primary host computer 110, to reflect any changes made to the data of the primary host computer 110 during operation. This ensures that the replicated data is as current as possible.”

Wang US 6,587,970 B1 col. 10, lines 58-63)

Wang US 6,587,970 B1 fails to explicitly teach that system information regarding quotes from market makers for the one or more instruments is not passed to and stored at the secondary site.

Kramer US 5,038,284 teaches “Still further objects of the invention relate to improvement of the ability to maintain and update in the portable stations, a table of symbols along with various factors that pertain to the computation of profit or loss, given prices and number of contracts, to provide for the addition of a transaction number at the entry within the portable stations, and **further to provide for bid and asked keys to permit reporting quotes as well as trades.**” Kramer US 5,038,284 col. 4, lines 16-17) Examiner notes that Kramer US 5,038,284 teaches the addition of bid and ask keys which make the reporting of quotes as well as trades optional.

It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Wang US 6,587,970 B1 to include receiving

Art Unit: 3684

and storing external information as taught by Kramer US 5,038,284,. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Wang US 6,587,970 B1 in this way in order to enable a secondary host computer to utilize a backup copy of data used by the primary host computer (see at least col. 12, lines 15-16 of Wang US 6,587,970 B1)

As per claim 21 (previously presented) Wang US 6,587,970 B1 in view of Kramer US 5,038,284 teaches a computer of claim 20.

Wang US 6,587,970 B1 further discloses monitoring the information regarding deals stored at the secondary site in order to update the information regarding orders stored at the secondary site. ("The replicated data may also be periodically updated, prior to a detected malfunction or failure of the primary host computer 110, to reflect any changes made to the data of the primary host computer 110 during operation." Wang US 6,587,970 B1 col. 10, lines 58-62)

As per claim 22 (previously presented) Wang US 6,587,970 B1 in view of Kramer US 5,038,284 teaches a computer of claim 20.

Wang US 6,587,970 B1 further discloses that the order information is provided to the secondary site via the deal information stored at the secondary site. ("This helps to ensure that data can be quickly accessed by both the primary and secondary host computers 110, 120, as different storage devices and adapters are involved in the transfers of data for the different host computers." Wang, US 6,587,970 B1 col. 35, lines 32-35)

As per claim 23 (previously presented) Wang US 6,587,970 B1 in view of Kramer US 5,038,284 teaches a computer of claim 20.

Wang US 6,587,970 B1 further discloses that copying of the orders and deals at the secondary site, and at defined intervals, process the orders based on information associated with the deals. ("The replicated data may also be periodically updated, prior to a detected malfunction or failure of the primary host computer 110, to reflect any changes made to the data of the primary host computer 110 during operation." Wang US 6,587,970 B1 col. 10, lines 58-62)

Claims 24-29 Canceled.

Conclusion

4. The following is prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Yanai (US 6,173,377 B1) teaches two data storage systems interconnected by a data link for remote mirroring of data. Each volume of data is configured as local, primary in a remotely mirrored volume pair, or secondary in a remotely mirrored volume pair. Normally, a host computer directly accesses either a local or a primary volume, and data written to a primary volume is automatically sent over the link to a corresponding secondary volume.

Art Unit: 3684

Tee (US 2006/0020646 A1) teaches a system and method for managing data including a network for interconnecting a plurality of computers. A data storage means is connected to the network to receive, store and transmit a plurality of files to and from the network.

Therrien (US 2004/0093555 A1) teaches a computer primary data storage system that integrates the functionality of file backup and remote replication to provide an integrated storage system that protects its data from loss related to system or network failures or the physical loss of a data center.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerald C. Vizvary whose telephone number is 571-270-3268. The examiner can normally be reached on Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Dunham can be reached on 571-272-8109. The fax phone number for the organization where this application or proceeding is assigned is 571-270-4268.

Art Unit: 3684

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason B Dunham/
Supervisory Patent Examiner, Art
Unit 3684

Gerald Vizvary
Patent Examiner, A.U. 3684
October 14, 2011